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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/164,206

09/30/1998

CARL J. DISTER

98RE155

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04/18/2005

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EXAMINER

MILLER, CRAIG S


ART UNIT

PAPER NUMBER

2857

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/164,206	DISTER, CARL J. 	
	<b>Examiner</b>	<b>Art Unit</b>	
	Craig Miller	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. In response to the decision of the Board of Patent Appeals and Interferences, the final rejection of the last office is withdrawn and the following non-final rejection is hereby deemed proper and imposed.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-24 are rejected under 35 U.S.C. § 103 as being unpatentable over Metheny *et al.* (5,763,969).

As to claims 1-6, 9-15 and 17-24 Metheny *et al.* discloses a dynamoelectric machine with attached controller [20] mounted to an outer surface of the machine [12], the controller comprising a heat dissipation device [fig. 6], positioned between the controller and the outer surface of the machine which dissipates heat generated by the machine into the surrounding air thereby minimizing heat transfer to the controller. Metheny *et al.* does disclose neither an integrated diagnostic module within the controller nor does Metheny *et al.* emphasize that the heat being dissipated by the motor casing engaging fins includes a portion of the heat transferred from the motor. The Examiner notes that it is well known to monitor machines in general and rotating machines and their related controllers in particular for their operating state (Applicant admits such in the middle of page 2 of the specification). The Examiner also notes that it is well known to make integral that which was separate, In re Larson, 144 USPQ 347 (CCPA 1965), “*Although it is true that invention may be present under some circumstances in making integral that which was separate before, we do not feel that such is the case here. Improved results only will not take the case out of the general rule. There is also a requirement that the unification or integration involves more than mere mechanical skill. In re Murray*, 19 CCPA (Patents) 739, 53 F.2d 541, 11 USPQ 155; *In re Zabel et al.*, 38 CCPA (Patents) 832, 186 F.2d 735, 88 USPQ 367.” Because it is known to monitor the operation of a rotating machine, because it is known that dynamoelectric machines generate heat which is harmful to electronics (see Metheny *et al.*, col. 6 stating in line 36), it would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate known monitoring electronics within the monitored dynamoelectric machine controller of Metheny *et al.* so as to receive the expected benefits derived therefrom such as more easily

performing admittedly known diagnostics to such dynamoelectric machines. As to the heat being dissipated by the motor casing engaging fins including a portion of the heat from the motor, such is deemed inherent within the system of Metheny *et al.* The flow of heat from the casing to the controller is discussed by Metheny *et al.* in col. 6. While Metheny *et al.* tries to minimize this flow, Metheny *et al.* does clearly disclose that some flow does exist. Because Metheny *et al.* includes cooling air flow through the area defined by the fins [48] the dissipation of motor heat from these engaging fins is inherently performed and thus fulfills the limitations of the claim.

Claims 7 and 16 are directed towards curved or same length engaging fins. Because Metheny *et al.* discloses that said fins should engage the motor casing and because motor casings have varying mating surface shapes, often including complex curves or flat mating surfaces, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the engaging fins should include curves or are necessarily of substantially the same lengths are similar if such is required to fulfill their required function.

Claim 8 is directed towards fins of different widths. Metheny *et al.* discloses that said fins perform the function of enclosing the cooling flow volume, dissipating heat from the control electronics, said control heat having locally different dissipation requirements (col. 6 lines 17+) and as noted above, the inherent dissipation of some portion of heat from the motor. Because one of ordinary skill in the art at the time the invention was made would be aware that fin widths affect the cooling properties of fins and that one must balance these various functions of the fins, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Metheny *et al.* as modified above, such fins of varying widths to achieve the necessary balance of fin cooling and cooling air flow control so as to receive the expected benefits derived there from such as enhanced cooling balance, absent a showing of unexpected results or synergistic effect from any particularly claimed combination.

More particularly with respect to claim 21, Metheny *et al.* includes a cooling air directing shroud [50].

More particularly with respect to claim 22 drawn to a baffle. A Baffle is defined as a usually static device that regulates the flow of a fluid or light. The serpentine cooling fin [96] of Metheny *et al.* fulfills the limitations of the claim.

4. Claim 25 is rejected under 35 U.S.C. § 103 as being unpatentable over Metheny *et al.* as applied to claim above, and further in view of Hays *et al.* and Wang *et al.*

As to claim 25, said claim is directed towards the use of a network backbone. Such real-time networked remote machine is well known within the art of machine diagnostics as evidenced by Hays *et al.* (col. 8 lines 32+) and Wang *et al.* (col. 8 lines 34+). The use of a network backbone to accomplish this is deemed required and therefore inherent within the teaching of Wang *et al.* Because the devices of Metheny *et al.* as modified above, Hays *et al.* and Wang *et al.* are within the art of machine diagnostics and because Hays *et al.* and Wang *et al.* recommend using real-time remote diagnostics, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Metheny *et al.* as modified above such online remote diagnostics including the inherently required networked backbone so as to receive the expected benefits derived there from such as enhanced system flexibility absent a showing of unexpected results or synergistic effect from any particular claimed combination.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Houf *et al.* (4,769,557) discloses a modular controller with cooling fins underneath.  
Lee (5,563,570) discloses heat insulating leg supports for electronic controller.  
CoChimin (5,877,576) discloses dynamoelectric machine cooling.  
Grönwall (Des. 360,879) discloses control housing standoff supports.

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Art Unit 2857

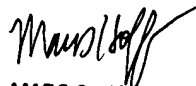
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6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Craig Steven Miller whose telephone number is (571) 272-2219. Central facsimile services are now available at (703) 872-9306.

The Examiner can normally be reached on Mondays through Thursdays from 6:30am-2:00pm EDT. Should repeated attempts to reach the Examiner be unsuccessful, the Examiner's Supervisor, Marc Hoff may be reached at (571) 272-2216.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Private PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

Craig Steven Miller (ss)  
11 April 2005

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800